

CLAIMS

1/ A measuring sonde (1) for a hydrocarbon well, the sonde comprising a main body (2), a downstream arm (3), and an upstream arm (5), at least one of said arms being fitted with measurement means (6) for determining the characteristics of the fluid flowing in the well, the sonde being characterized in that said downstream and upstream arms are connected:

- to the main body respectively via first and second sliding pivot links (A and E); and
- to respectively first and second ends of a skid (4) via first and second pivot links (B and D).

2/ A measuring sonde according to claim 1, characterized in that pivoting of the downstream and upstream arms relative to the skid is limited by the presence of abutments on the first and second pivot links.

3/ A measuring sonde according to claim 1 or claim 2, characterized in that it has a secondary arm (7) connected firstly to the main body via a third pivot link (F) and secondly to the skid via a third sliding pivot link (C).

4/ A measuring sonde according to claim 3, characterized in that the secondary arm includes optical measurement means (8).

5/ A measuring sonde according to claim 3 or claim 4, characterized in that the secondary arm is constituted by two parallel blades.

6/ A measuring sonde according to any one of claims 3 to 5, characterized in that the secondary arm (7) can be received inside the downstream arm (3).

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- 7/ A measuring sonde according to any preceding claim, characterized in that the downstream arm and/or the upstream arm is/are constituted by parallel blades interconnected by bridges.
- 8/ A sonde according to any preceding claim, characterized in that the axis of the main body (2) is off-center relative to the axis of the well.
- 9/ A measuring sonde according to any preceding claim, characterized in that the downstream and upstream arms are pivoted relative to the main body in a closed position in which the arms are received inside said main body and an open position in which said arms extend across the stream flowing along the well.
- 10/ A measuring sonde according to any preceding claim, characterized in that the downstream arm and/or the upstream arm is/are connected to a motor module (9) enabling arm movement relative to the main body to be controlled, said motor module being deactivatable.
- 11/ A measuring sonde according to claim 10, characterized in that the connection between the motor module and the downstream and/or upstream arms is separable.
- 12/ A measuring sonde according to any preceding claim, characterized in that the upstream arm has measurement means (6) for measuring the speed of the fluid flowing in the well.

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